

ABSTRACT OF THE DISCLOSURE

Surf AS

The present invention provides a magnetic recording medium with a high normalized coercive force and superior thermal stability, as well as a method of producing such a magnetic recording medium and a magnetic recording device incorporating such a magnetic recording medium. A magnetic recording medium according to the present invention comprises a non-magnetic base material, and a ferromagnetic metal layer of cobalt based alloy formed on top of this base material with a metal underlayer disposed therebetween, and displays a coercive force H_c of at least 2000 (Oe) and an anisotropic magnetic field $H_{k^{grain}}$ of at least 10,000 (Oe). Furthermore, magnetic recording media in which the aforementioned metal underlayer and/or the ferromagnetic metal layer are fabricated in a film fabrication chamber with an ultimate vacuum at the 10^{-9} Torr level are preferred.

A magnetic recording medium according to the present invention can be ideally applied to hard disks, floppy disks, and magnetic tapes and the like.

TOP SECRET - GOVERNMENT USE ONLY